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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/666,329	09/22/2003	Randolph S. Barth	5159	8384
7590	09/22/2005			
Charles I. Brodsky, Esq. 2 Bucks Lane Marlboro, NJ 07746			EXAMINER SAN MARTIN, EDGARDO	
			ART UNIT 2837	PAPER NUMBER

DATE MAILED: 09/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/666,329

Applicant(s)

BARTH, RANDOLPH S.

Examiner

Edgardo San Martin

Art Unit

2837

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 22 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 September 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Drawings***

1. Figures 1 - 4 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Double Patenting***

2. Applicant is advised that should claims 6 and 8 be found allowable, claims 7 and 9, respectively, will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which the subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1 – 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barth (US 5,199,258) in view of Bainbridge (US 5,092,122).

With respect to claim 1, Barth teaches an exhaust system of an automotive vehicle comprising a collector pipe having an input end including a plurality of apertures (Fig.2, Items 72, 74, 76 and 78) spaced one apart from another, and an output end; a plurality of pipes (Fig.1, Items 80, 82, 84 and 86) coupled from the head of an internal combustion engine to a respective one of the plurality of apertures of the collector pipe at the input end; an exhaust pipe coupled to the output end of the collector pipe; with each of the plurality of pipes and the exhaust pipe being composed a plurality of pipe segments, individual ones of which being of preselected length, and cut at their respective ends at preselected angles, for joining together in orientation to traverse component parts of the automotive vehicle engine, its rear housing, steering system and control installations (Figs.1 – 3; Col.2, Line 67 – Col.5, Line 31); but fails to disclose wherein at least one of the exhaust pipe and each of the plurality of pipes having an outer diameter less than an inner diameter of a further pipe additionally included to surround and contain same.

Nevertheless, Bainbridge teaches an exhaust system of an automotive vehicle comprising an exhaust pipe (Fig.7, Item 32) having an outer diameter less than an inner diameter of a further pipe (Fig.7, Item 36) additionally included to surround and contain same (Figs.6 – 8; Col.2, Line 59 – Col.4, Line 66).

It would have been obvious to a person with ordinary skill in the art at the time of the invention was made to employ the Bainbridge double pipe configuration with the Barth design because it would provide the system with a insulated pipe section strong enough to withstand the rigors of use and further providing heat shielding properties and exhaust system noise absorption.

With respect to claims 2, 14 and 19, Bainbridge teaches wherein the further surrounding pipe (Fig.3, Item 36) is centered about the pipe segment (Fig.3, Item 32) forming the exhaust pipe.

With respect to claims 3 and 4, the Examiner considers that it would have been an obvious matter of design choice to provide pipe segments of certain diameters in order to acoustically tune the pipe segments, in addition to provide an optimum flow performance, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or working ranges involves only routine skill in the art. In re Aller, 105 USPQ 233; furthermore, such a modification would have involved a mere change in the size of a component. A change in size is generally recognized as being within the level of ordinary skill in the art. In re Rose, 105 USPQ 237 (CCPA 1955).

With respect to claims 5, 10, 11, 15 and 16, the Examiner considers that the obvious combination of Barth and Bainbridge teach the limitations described in the claims (Barth: Figs.1 – 3; Col.2, Line 67 – Col.5, Line 31; Bainbridge: Figs.1 – 3 and 6 – 8; Col.2, Line 59 – Col.4, Line 66).

With respect to claims 6, 7, 12 and 17, the Examiner takes Official Notice that it is well known in the art of acoustics to provide the inner pipe of a double pipe configuration with apertures along the lateral length in order to provide fluid access to the resonator chamber created by the space formed between the inner and outer pipes, further providing the system with a sound muffling property.

With respect to claims 8, 9, 13 and 18, Bainbridge teaches further including a fiber insulation (Figs.2, 7 and 8, Item 38; Col.3, Lines 43 – 55) wrapping around the contained pipe segments (Figs. 2, 7 and 8, Item 32). Furthermore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to employ steel wool as the fiber insulation material, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. In re Leshin, 125 USPQ 416.

### ***Conclusion***

4. The attached hereto PTO Form 892 lists prior art made of record that the Examiner considered it pertinent to applicant's disclosure.

**Contact Information**

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Edgardo San Martin whose telephone number is (571) 272-2074. The examiner can normally be reached on 8:00AM - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Martin can be reached on (571) 272-2107. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Edgardo San Martín  
Primary Examiner  
Art Unit 2837  
Class 181  
September 18, 2005